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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,941	02/27/2004	Warren M. Farnworth	2269-5594US (00-1204.00/U)	9178
24247	7590	09/21/2005	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			HYEON, HAE M	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/788,941

Applicant(s)

FARNWORTH ET AL.

Examiner

Hae M. Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-92 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

- I. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-17, drawn to a contact for a semiconductor device component comprising a polymer core with a conductive coating, classified in class 439, subclass 886.
  - II. Claims 18-33 and 39-43, drawn to a method for forming a contact comprising stereolithographically fabricating a core and coating with a conductive material, classified in class 427, subclass 117.
  - III. Claims 34-38, drawn to a contact of a semiconductor device comprising a plurality of at least partially superimposed, contiguous, mutually adhered layers, classified in class 361, subclass 776.
  - IV. Claims 44-59, drawn to a method for fabricating a probe card comprising a sacrificial layer over a substrate including an elongate contact and a support plate laterally around an intermediate section of the contact, classified in class 257, subclass E21.507.
  - V. Claims 60-73, drawn to a method for fabricating a probe card comprising a substrate including an aperture, stereolithographically fabricating an outer shell of a contact and filling a conductive material into a channel extending through the outer shell of the contact, classified in class 438, subclass 127.
  - VI. Claims 74-82, drawn to a semiconductor device comprising a substrate, a flexible and resilient contact, and a protective structure to prevent deformation of the contact, classified in class 438, subclass 200.

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VII. Claims 83-92, drawn to a method for protecting contacts that protrude from a substrate, classified in class 29, subclass 886.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the core of contact of the invention I can be made by molding. Stereolithographic fabrication of the invention II is not required.

3. Inventions III-VII and I are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are:

- A contact comprising a polymer core with a conductive coating of the invention I.
- A contact comprising a plurality of partially superimposed, contiguous, mutually adhered layers of the invention III, which does not require coating.
- A method for fabricating a probe card of the inventions IV and V.
- A semiconductor device with a protective structure to prevent deformation of a contact of the invention VI.
- And a method for protecting flexible, resilient contacts of the invention VII.

4. Inventions III-VII and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation,

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different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are:

- A method for forming a contact with stereolithographically fabrication and coating of the invention II.
- A contact comprising a plurality of partially superimposed, contiguous, mutually adhered layers of the invention III, which does not require coating.
- A method for fabricating a probe card of the inventions IV and V.
- A semiconductor device with a protective structure to prevent deformation of a contact of the invention VI.
- And a method for protecting flexible, resilient contacts of the invention VII.

5. Inventions V and IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the probe card of the invention IV does not required a channel extending through the outer shell of a contact filled with a conductive material of the invention V and the probe card of the invention V does not required a sacrificial layer and a support plate of the invention IV.

6. Inventions VI-VII and IV-V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are:

- A method for fabricating a probe card of the inventions IV and V.

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- A semiconductor device with a protective structure to prevent deformation of a contact of the invention VI.
- And a method for protecting flexible, resilient contacts of the invention VII.

7. Inventions VII and VI are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the protective structure can be made integrally with the substrate.

8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

9. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

10. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

11. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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### CONCLUSION

12. The examiner believes that the restriction made in the previous office action filed on June 20, 2005 did not properly divided all the different inventions included in the instant application. Therefore, the examiner withdraws the last office action filed on June 20, 2005 and is making this new restriction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M. Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hae M Hyeon  
Primary Examiner  
Art Unit 2839

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*hnh*

*Hae Moon Hyeon*